



State of Ohio Environmental Protection Agency

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January 9, 2002

Mr. Johnny Reising
U.S. Department of Energy, Fernald Area Office
P.O. Box 538705
Cincinnati, OH 45253-8705

FILE: 6446, 60299
JAN 10 P 12:25
OG C-0523
FERNALD

RE: COMMENTS ON WASTE PIT LINERS INVESTIGATION

Dear Mr. Reising:

This letter provides Ohio Environmental Protection Agency comments on the Project Specific Plan for Waste Pits Remedial Action Project Investigation of Waste Pit Liners and Liner Subsurface Material.

We entertain this proposal to puncture the waste pit liners with a great deal of trepidation. Breaching of the native clays overlaying the GMA has a potential for serious consequences. The Ohio EPA has recently rejected a proposal to install monitoring wells in the footprint of the OSDF because we considered the risk of contaminating the GMA to out weigh any benefits of defining the extent and movement of what was known as the Plant 6 plume. Our concerns about the sampling proposed in this Plan are greater because the potential source of contamination is so much greater. However, we acknowledge the large data gaps that exist in defining the thickness and extent of the waste pits liners and the extent of the contamination in the underlying soils. We also appreciate that it is impossible to plan for the costs and schedule impacts using only the information presently available. Never the less, the primary concern when performing the sampling should be the protection of the aquifer. Data from the first round of sampling should be carefully interpreted to minimize the number of samples needed. A detailed report should be written for review and approval. The report should contain the data from this initial study and identify conclusions about the thickness of the liners and the depth of contamination below the liners. An analysis of data shortfalls should be used to justify


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taking additional samples from the other pits.

Should you have any questions, please contact Tom Ontko or me.

Sincerely,



 Thomas A. Schneider
Fernald Project Manager
Office of Federal Facilities Oversight

cc: Jim Saric, U.S. EPA
Terry Hagen, Fluor Fernald
Mark Shupe, GeoTrans, Inc.
Francie Hodge, Tetra Tech EM Inc.
Ruth Vandergrift, ODH

Enclosure

Ohio Environmental Protection Agency Comments on the PSP for Waste Pits Remedial Action Project Investigation of Waste Pits Liners and Liner Subsurface Material

- 1) Commenting Organization: Ohio EPA Commentor: OFFO
 Section #: Pg #: Line #: Code: general
 Comment: Breaching of the native clays overlaying the GMA has a potential for serious consequences. The Ohio EPA has recently rejected a proposal to install monitoring wells in the footprint of the OSDF because we considered the risk of contaminating the GMA to out weigh any benefits of defining the extent and movement of what was known as the Plant 6 plume. Our concerns about the sampling proposed in this Plan are greater because the potential source of contamination is so much greater. However, we acknowledge the large data gaps that exist in defining the thickness and extent of the waste pits liners and the extent of the contamination in the underlying soils. We also appreciate that it is impossible to plan for the costs and schedule impacts using only the knowledge we have at the present time. Nevertheless, we entertain the proposal to pierce the liners with a great deal of trepidation.

- 2) Commenting Organization: Ohio EPA Commentor: OFFO
 Section #: Pg #: Line #: Code: general
 Comment: We see a disconnect between the Decision in Section 2.0 in the DQOs and the text in the Plan. Section 2.0 states, "Delineate the vertical and/or horizontal extent of contamination of the waste pit liner material as well as that of the soils underlying the waste pits". However, the Plan calls for only ten samples from two waste pits. We maintain that the number of samples is not sufficient to achieve the DQOs. We are not suggesting that the number of samples be increased, but rather that the objectives of this investigation are not adequately reflected by the DQOs.
 The statement of problem (Section 1.0 of the DQOs) is to define the extent of the contamination with respect to FRLs and WAC. We suggest that the problem statement be re-drafted to reflect that the RI/FS investigation did not determine the quantities of either the pit liners or the quantity of impacted soil below the liner. Determining these volumes for planning purposes is the problem to be answered.

- 3) Commenting Organization: Ohio EPA Commentor: OFFO
 Section #: 1.1 Pg #: 1-1 Line #: 20 Code: c
 Comment: The text states that "This activity will be conducted in multiple phases as excavation of the waste pits progresses". Plans for future sampling through the waste pits' liners should be deferred until the data from the current samples are analyzed. An analysis of the data may conclude that soil quantities may be estimated reliably enough for planning purposes using only the data from Pits 1 and 3.

- 4) Commenting Organization: Ohio EPA Commentor: OFFO
 Section #: 1.3 Pg #: 1-2 Line #: 25 Code: c
 Comment: It appears that radiological constituents were inadvertently left off of the COC

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list. Please correct.

- 5) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 1.4 Pg #: 1-3 Line #: 8 Code: c
Comment: The text states that, "Later additional borings and sampling activities...will be identified by a Variance/Field Change Notice to this PSP." This is not acceptable. A detailed report should be written for review and approval. The report should contain the data from this initial study and identify conclusions about the thickness of the liners and the depth of contamination below the liners. An analysis of data shortfalls should be used to justify taking additional samples from the other pits. There is a possibility that data from Pits 1 and 3 will be conclusive enough to infer the depth of contamination below the other pits.
- 6) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.2 Pg #: 2-1 Line #: 20 Code: c
Comment: The text states that, "For those pits with clay liners, the liner and the liner subsurface materials are of distinctly different composition." However, the text on line 14 page 1-2 states that Pits 1 and 3 (among others) are lined with native clay either from an *in situ* clay lens or excavated from the Burn Pit. It is unclear how a visual examination of cores will be able to distinguish between a liner constructed from *in situ* clay and the undisturbed original tills.
- 7) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.2 Pg #: 2-1 Line #: 28 Code: c
Comment: The text states that samples will be collected with a vehicle-mounted Geoprobe system unless the borehole location is inaccessible in which case the sampling instrument will be manually driven. The Ohio EPA will comment elsewhere that all boreholes should be plugged using an injected bentonite grout slurry and not bentonite pellets. Considering the pumps and hoses associated with injecting grout, it may be best to limit this investigation to only those locations that are accessible to the vehicle-mounted direct push equipment.
- 8) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.6 Pg #: 2-4 Line #: 26 Code: c
Comment: Because of the high costs associated with remediating the GMA and the increased potential of contaminating the aquifer, boreholes should only be closed using an injected grout slurry. The use of bentonite pellets is not acceptable.